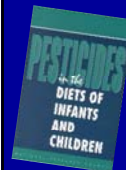


## Children's Environmental Health: Looking Backward, Looking Forward

2007 Children's Environmental Health Workshop  
Discover, Treat, Prevent, Prepare  
October 11, 2007

Howard Frumkin, M.D., Dr.P.H., Director  
National Center for Environmental Health /  
Agency for Toxic Substances and Disease Registry  
Centers for Disease Control and Prevention

## Looking Backward: Milestones



- 1993: NAS Report
- 1996: Food Quality Protection Act
- 1997: PEHSUs
- 1998: Children's Environmental Health Research Centers
- 1999:
- 2000: Children's Health Act (authorized Children's Health Study)

## Looking Backward: Strengths

### Research:

- Chemicals (Pb, Hg, PCBs, pesticides, ETS, air pollution, etc.)
- Diseases (asthma, autism, etc.)
- Methods (community-based participatory research, genetics)
- Vulnerable populations (farm families, inner city)

## Looking Backward: Strengths

### Education:

- Fellowship training
- Books and journals
- Web sites

### Service

- Network of community resources in certain cities
- Technical tools (Healthy SEAT)



## Measuring progress

- Do children have healthier environments?
- Do we have a better understanding of how to protect children's health?
- Do health care providers address children's environmental health more effectively?
- Do parents understand how to provide safe, healthy environments for their children?
- Are policies adequately child-protective?

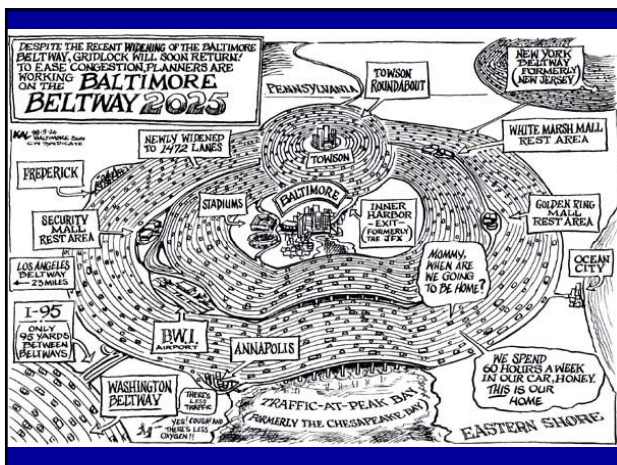
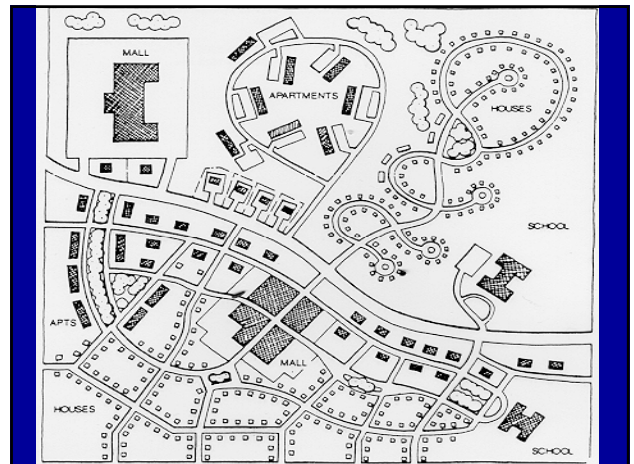
## Changed circumstances

- Obesity epidemic
- Biomonitoring
- Genetic advances
- Poverty and uninsurance
- Political context

## The next 10 years



- The built environment
- The outdoors
- Climate change
- Mental health
- Combining environmental and non-environmental factors
- Communication





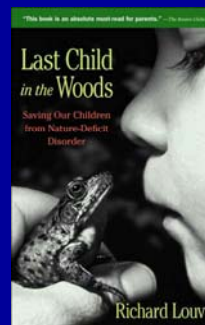


Marshall High School, Marshall, MN

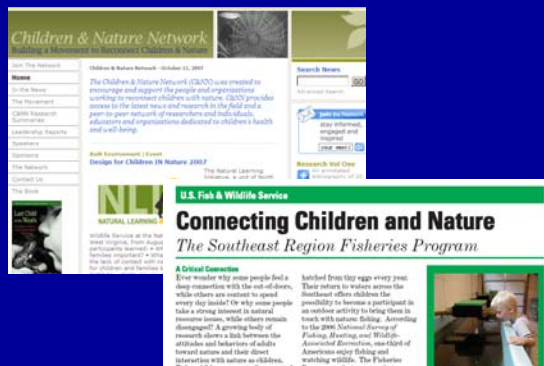


Hubbard Lake Elementary School, Hubbard Lake, Michigan.  
"Outstanding in Its Field"

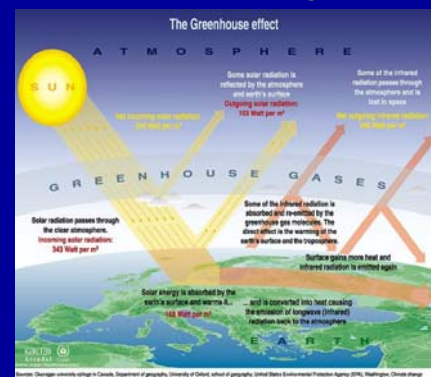
## The outdoors



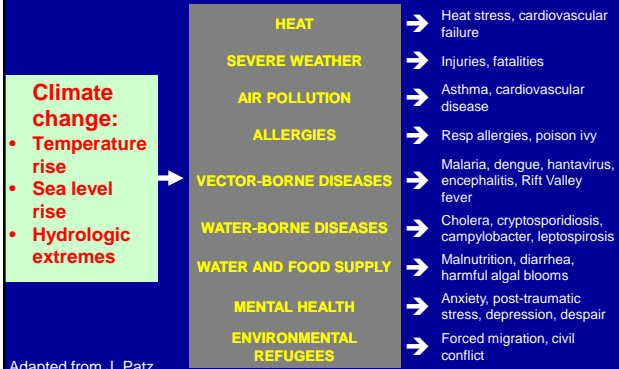
## The outdoors



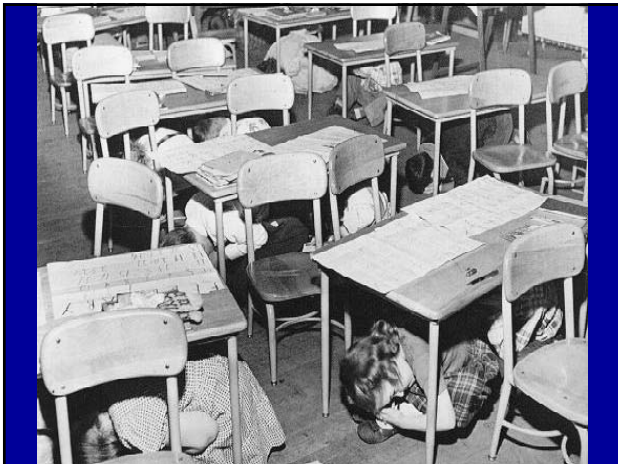
## Climate change



## Potential Health Effects of Climate Change



Adapted from J. Patz







**Climate Change Scenarios Scare, and Motivate, Kids**

By [Darragh Johnson](#)  
Washington Post Staff Writer  
Monday, April 16, 2007, Page A01

The boy has drawn, in his third-grade class, a global warming timeline that is his equivalent of the mushroom cloud.

"That's the Earth now," the 9-year-old says, pointing to a dark shape at the bottom. "And then," he says, tracing the progressively lighter stripes across the page, "it's just starting to fade away."

**Climate change is kids' top fear**

*How we're damaging the environment is more of a worry to you than getting a girl or boyfriend, says a survey.*

The results showed three quarters of 11 to 14-year-olds worry about climate change, compared to 41% who are worried about going out with someone.

And it looks like you lot aren't just all talk - 63% turn off the lights when you leave a room, 62% of you recycle, and 75% say we should recycle more.

The survey queried 1,500 11 to 14-year-olds on their views on the



Vol. 33, No. 18      The Leading Independent Newspaper for the Psychiatrist—Since 1972      OCTOBER 2005

**Mental Health Problems From Katrina Persist**

By [Dore Turner](#)  
Associated Press  
Thursday, November 9, 2006, Page A12

ATLANTA, Nov. 8 -- Hurricane Katrina left more than gutted houses and empty streets along the Gulf Coast.

**Newsweek**

**'A Very Long Recovery'**

A psychiatrist talks about the emotional fallout from disasters like Hurricane Katrina and what can be done to help the victims cope.

**Katrina Survivors' Psychiatric Needs Unpredictable**

*'Cascade of disasters' magnifies trauma.*

BY [JOYCE FRIEDEN](#)      *Asbestos including help, it was mentioned by a disaster geographer and was made a part of a report on a national disaster training site.*

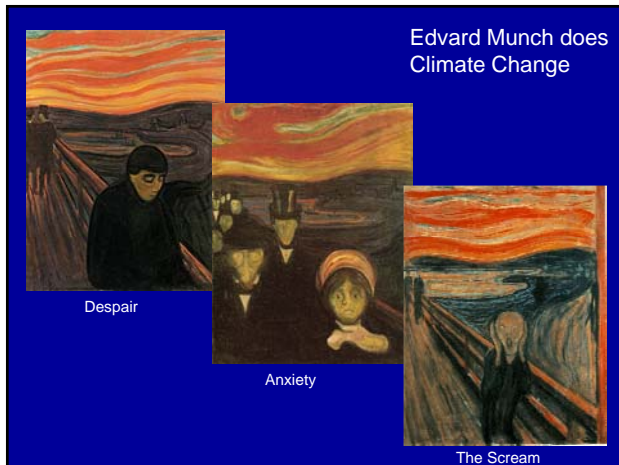
**TIME**

**Is New Orleans Having a Mental Health Breakdown?**

By [ROBERTA KILLICKER](#) NEW ORLEANS

Over the past several months, psychiatrist James Barlow has witnessed a disturbing trend among his patients in New Orleans -- a noticeable slide from post-Katrina anxiety to more serious, and harder to treat, cases of major depression. At the same time, the city's system for dealing with mental health care is suffering a major breakdown of its own. "People are just wearing down," says Barlow. "There was an initial spirit about bouncing back and recovering, but it's diminished over time, so we're here because people."





Ted Nordhaus & Michael Shellenberger

**Break Through**

From the Death of Environmentalism to the Politics of Possibility

"Think of the verbs associated with environmentalism and conservation: 'stop,' 'restrict,' 'reverse,' 'prevent,' 'regulate,' and 'constrain.' All of them direct our thinking to stopping the bad, not creating the good."

➡ The need for positive, aspirational messages.



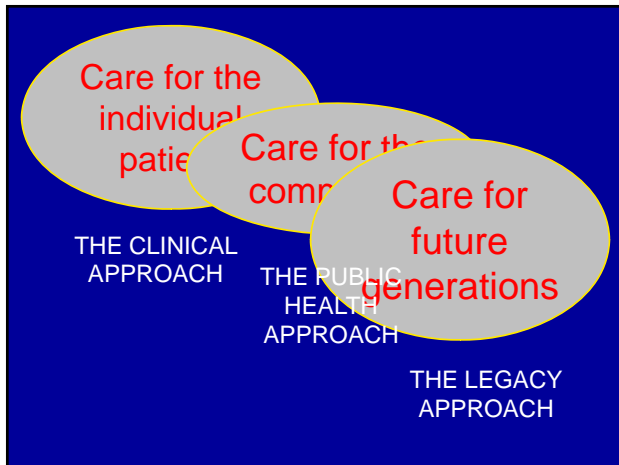
Ted Nordhaus & Michael Shellenberger

**Break Through**

From the Death of Environmentalism to the Politics of Possibility

"The challenge of climate change is so massive, so global, and so complex that it can only be overcome if we look beyond the issue categories of the past and embrace a grand new vision for the future."

➡ The need for bold, cross-cutting thinking.



## Summary

- A decade of proud accomplishments
- A decade of emerging opportunities
  - The built environment
  - The outdoors
  - Climate change
  - Mental health
  - Combining environmental and non-environmental factors
  - Communication

